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REMARKS

In the Office Action dated March 10, 2005, claims 1-25 are pending. Claims 1, 3, 20, and 23 are independent claims from which all other claims depend therefrom. Claims 3-5 and 11 have been amended. Claims 26-28 are newly added. The amendments herein do not present new issues for consideration. Thus, Applicant respectfully requests that the amendments be entered because it will place the application in a better condition for appeal, if necessary.

Claim 4 stands objected to for informality reasons. The Office Action states that "a frame" should be "said imaging tube frame". Claim 4 is herein amended to recite as such.

Claims 1-9 and 11-25 stand rejected under 35 U.S.C. 102(b) as being anticipated by Janouin et al. (U.S. Pat. No. 4,995,065).

Independent claims 1, 3, 20, and 23 recite similar limitations and are therefore described together. Claim 1 recites an energy-absorbing device for an imaging tube that has a housing. The energy-absorbing device includes an energy-absorbing body that is mechanically coupled to the housing and is adapted to absorb kinetic energy directed at the housing and generated from the radial release of a material fragment within the imaging tube. Claims 3, 20, and 23 recite an imaging tube, an imaging system, and a method of absorbing kinetic energy within an imaging tube. Claims 3, 20, and 23 recite similar limitations as that recited in claim 1. Note that the terms "is adapted to" refers to the ability of the energy-absorbing device to withstand the forces exerted thereon by the material fragment.

Janouin discloses an x-ray tube 1 with a sheath 2 and a glass casing 3. A casing 17 contains a substance 16 and is adhered to the sheath 2. During operation of the x-ray tube 1 the substance 16 melts to a liquefied state. In doing so, the substance 16 absorbs the thermal energy within the x-ray tube 1. The substance 16 is in a solid state when the x-ray tube 1 is not in use. The

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substance 16 is formed of a material, such as wax, so that it becomes liquefied during operation. The casing 17 encases the substance 16 and separates the substance 16 from the internal space 15 of the tube 1. The casing 17 prevents the substance 16 from mixing with the cooling fluid in the space 15. The casing 17 is thin and expandable to adjust for change in size of the substance 16, due to temperature and state changes thereof.

The Office Action states that Janouin discloses an energy-absorbing body as claimed. Applicant, respectfully, traverses. Applicant submits that the substance 16 and the casing 17 of Janouin are not the same and appear to be incapable of performing as the energy-absorbing device claimed.

Applicant submits that the substance 16 and the casing 17 of Janouin are designed for absorbing thermal energy. It is unclear from Janouin whether the substance 16 and the casing 17 are capable of absorbing kinetic energy. However, it is clear that the substance 16 and the casing 17 are incapable of absorbing kinetic energy received or generated from the radial release of a material fragment within an imaging tube. In the background section of the present application the applicant has stated that the radial release of material fragments can cause cracking in an imaging tube housing. Clearly if the kinetic energy of the fragments is high enough to cause cracking in the housing, it would also cause damage to the casing 17. Damage to the casing 17, such as punctures or cracking, would result in the leaking of the substance 16 into the cooling fluid, which as stated in Janouin is undesirable.

Nowhere in Janouin is the absorption of kinetic energy mentioned or suggested. Janouin does not mention or solve the primary problem solved by the present invention, namely to absorb kinetic energy from the radial release of rotating anode material fragments. Applicant submits that to compare the substance 16 and the casing 17 to the energy-absorbing device claimed is far reaching.

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In order for a reference to anticipate a claim the reference must teach or suggest each and every element of that claim, see MPEP 2131 and *Verdegrad Bros. V. Union Oil Co. of California*, 814 F.2d 628. Thus, since each and every element of claims 1, 3, 20, and 23 are not taught or suggested by Janouin, Applicant submits that claims 1, 3, 20, and 23 are novel, nonobvious, and are in a condition for allowance at least in view of Janouin. Also, since claims 2, 4-9, 11-19, and 21-28 depend from claims 1, 3, 20, and 23, respectively, they are also novel, nonobvious, and are in a condition for allowance for at least the same reasons.

Claims 3 and 10 stand rejected under 35 U.S.C. 102(e) as being anticipated by Takenaka et al. (U.S. Pat. No. 6,487,273 B1).

Takenaka discloses an x-ray tube assembly 10 that includes an integral housing 12, which encloses an anode assembly 18 and target 22, and a separately located open ended airflow shell 52. A fan 50 pulls air around the housing 12 and through the nearby shell 52. The shell 52 is coated with a sound insulating material to reduce noise in the x-ray tube assembly 10.

The Office Action states that Takenaka teaches a rotating target 18 that is coupled within the housing 52. Applicant traverses. Applicant submits that within Takenaka item 18 is an anode assembly and item 52 is a shell. Also, the rotating target 22 of Takenaka is not coupled within or even located within the shell 52. The target 22 is located within the housing 12, which is located separate from and not within the shell 52.

The Office Action further states that Takenaka discloses an energy-absorbing device that is mechanically coupled to the housing 52 and refers to the coating on the shell 52. Applicant again traverses. As stated, item 52 is a shell not a housing. Applicant agrees that the shell 52 is coated with a sound insulating material. However, the sound insulating material is not mechanically coupled to the housing 12, but rather is a coating on the shell 52.

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The Office Action also states that the sound insulating coating of Takenaka is adapted to absorb energy within an energy wave generated from a rotating target 18. Again item 18 is an anode assembly. Note also that claim 3 is herein amended to require that the energy wave be a kinetic energy wave generated from the radial release of a material fragment of a rotating anode within a housing. The sound insulating coating of Takenaka does not absorb kinetic energy generated from the radial release of a material fragment from the anode 22 or from within the housing 12. The sound insulating coating merely absorbs noise within the shell 52.

Thus, Takenaka also fails to teach or suggest each and every limitation of claim 3, therefore, claim 3 is novel, nonobvious, and is in a condition for allowance. Since claim 10 depends from claim 3, it too is also novel, nonobvious, and is in a condition for allowance.

With respect to claim 26-28, Applicant submits that since they depend from allowable claims 1 and 3, they too are novel, nonobvious, and are in a condition for allowance for at least the same reasons. However, for argument sake, falsely assuming that the substance 16 and/or the casing 17 of Janouin are the same or performs the same as the claimed energy-absorbing device, the substance 16 and the casing 17 are not both in a solidified state during the operation of the x-ray tube 1, are not capable of continuously absorbing the claimed kinetic energy, and are not in the form of a single non-encasing member. Although the casing 17 may be in a solidified state during the operation of the x-ray tube 1, it is not capable of absorbing the kinetic energy claimed whether sporadically or continuously applied.

Applicant also believes that the present application was unjustly made Final. In the previous response amendments were made to the originally filed claims to define the patent protection to which the Applicant is justly entitled. In response to those amendments new art, not previously disclosed, was presented, specifically the above relied upon references. Applicant believes that he should have been provided with an opportunity to respond to the

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newly presented art prior to the present case being made Final, especially since both of the above-identified references clearly fail to teach or suggest that claimed, as is clear from the above presented arguments and would be by one skilled in the art. Referring to MPEP 706.07, Applicant agrees that under present practice a second or subsequent action may be made final even when the Examiner introduces a new ground of rejection as is necessitated by Applicant's amendment. However, present practice does not sanction hasty or ill-considered final rejections. The Applicant has merely sought to define the patent protection to which he is justly entitled. The Applicant has previously and clearly amended the claims such that the claimed invention is not taught or suggested by the prior art, and in so doing he deserves the cooperation of the Examiner and should not be prematurely cut off in the prosecution. Also, the Applicant has responded promptly and has not resorted to technical or obvious subterfuges.

In light of the amendments and remarks, Applicant submits that all of the objections and rejections are now overcome. The Applicant has added no new matter to the application by these amendments. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, the Examiner is respectfully requested to call the undersigned attorney.

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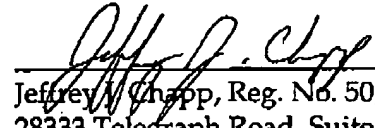
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The Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any overpayment to Deposit Account No. 50-0476.

Respectfully submitted,

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